

**DEPARTMENT OF PESTICIDE REGULATION  
FUNCTIONAL OPERATION PLAN  
2008/2009**

**Pesticide Registration**

Pesticide registration is the scientific, legal, and administrative evaluation process of a pesticide product before it can be sold or used in California. The registration process also includes special registration activities such as reviewing and issuing research authorizations; reviewing and issuing emergency exemption Section 18 products; reviewing and registering structural pest control devices; and consulting with the U.S. Environmental Protection Agency (U.S. EPA) on federal registration issues.

**Performance Goal 1: Process 5,500 actions on submissions.**

1. Reach a registration decision on approximately 15 new active ingredients (depending on the number of new active ingredients received) within an average of one year of submission of a complete evaluation package.
2. Reach a registration decision on products containing currently registered active ingredients within an average of six months of submission of a complete package.
3. Evaluate 13 Section 18 requests.
4. Evaluate 470 research authorizations.
5. Evaluate 10 Special Local Needs.

**Performance Goal 2: Complete the license renewal of approximately 11,300 pesticide products by February 1, 2008.**

**Performance Goal 3: Reduce workload and increase efficiency.**

1. Evaluate, develop, and implement stakeholder outreach programs. Initiate the development of training programs and communication strategies by June 2008.
2. Track and report workload changes in the data evaluation process due to the implementation of Food and Agricultural Code Section 12811.5 (AB 1011).
3. Participate in the Accepted Labels State Tracking and Repository e-labeling pilot project developed by the National Pesticide Information Retrieval System at Purdue University to examine the feasibility of receiving and making available electronic pesticide product labels. Report on pilot project accomplishments.

**Performance Goal 4: Continue to develop work share programs with U.S. EPA.**

**Risk Assessment**

Risk assessment is a process designed to answer questions about a chemical's toxicity, what exposure results from its various uses, what the probability is that it will cause harm, and how to characterize the risk. Risk assessment can be broken down into four steps: (1) hazard identification; (2) dose-response assessment; (3) exposure assessment; and (4) risk characterization. DPR takes a comprehensive approach to risk assessment and assesses potential dietary, workplace, residential, and school areas, and ambient air exposures. Risk assessment is often the driving force behind new regulations and other use restrictions. Risk assessment also includes special toxicology review activities, such

as reviewing emergency determinations of potential human impacts resulting from illegal residues of pesticides on agricultural commodities, and coordinating Proposition 65 activities with the Office of Environmental Health Hazard Assessment (OEHHA).

**Performance Goal 1: Complete six risk assessments under SB950, AB2161 or AB1807 during the fiscal year 2007-08.**

**Performance Goal 2: Annually publish prioritization list for comprehensive risk assessments and initiate assessments according to DPR's risk assessment prioritization and initiation process.**

### **Licensing and Certification**

Licensing and Certification ensures that licensed individuals are competent and knowledgeable in selling, possessing, storing, handling, applying, and recommending the use of pesticides. DPR examines and licenses commercial pest control applicators, aerial applicators, pest control dealer designated agents, and pest control advisers, and certifies pesticide applicators that use or supervise the use of restricted pesticides. These license and certificate holders are required to complete continuing education hours related to pesticides and pest management in order to renew. This requirement provides the license and certificate holders with updates in pesticide laws and regulations, new pest control application technology, and pest management techniques. Licensing and Certification also licenses pest control businesses, maintenance gardener pest control businesses, pesticide brokers, and pest control dealers.

### **Performance Goal 1: Administer the Licensing and Certification Program.**

1. Processed 13,800 license and certificate applications (new and renewals).
2. Administered 9,151 exams.
3. The minimum qualifications for new pest control advisers rulemaking were re-noticed and the regulations were approved by OAL in April 2008. This regulation allowed for more flexibility in qualifying for the PCA License.
4. Accredited approximately 2,900 continuing education courses and audit approximately 8-10 courses.
5. The laws and regulations examination revisions were not completed. The Laws and Regulations Study guide needs to be revised in 2009.
6. The new maintenance gardener pest control study guide and examination question pool were finalized by June 2008. Also, it was translated into Spanish by DPR in 2008. The publication will be available for use by March 2009.
7. The new software for the licensing and certification database migration project was implemented in August 2007.
8. DPR worked with the University of California, Integrated Pest Management (UCIPM) Program to provide ongoing cooperative services in accordance with a multi-year interagency agreement that was approved between the two agencies in

2008. Staff worked with UCIPM and developed the priorities for the 2008/09 fiscal year related to licensing and certification study guides and examinations which are included in the interagency agreement.

9. DPR worked with UCIPM to develop the new field fumigation study guide and examination which was completed in December 2008 and will be posted in January, 2009.
10. The VOC rulemaking notice added the Field Fumigation subcategory to the Plant Agriculture (D), Demonstration and Research (J) and Regulatory Pest Control (G) categories for the qualified applicator license and certificate in 2008 and the subcategory will be implemented in 2009.
11. A rulemaking package to revise the terms of the Maintenance Gardener, subcategory Q license and to formally list all qualified applicator subcategories in regulation was prepared as a final draft for submission to the DPR rulemaking coordinator for notice in 2009.

#### **Permitting and Pesticide Use Reporting**

Permitting is an ongoing program to assess, evaluate, and mitigate the use of restricted materials (California Environmental Quality Act equivalency). Pesticide use reporting is an ongoing program to collect and process data on full use reporting of agricultural and structural pesticide applications, per the Food Safety Act of 1989 (Chapter 1200, AB 2161). Under full use reporting, certain agricultural pesticide uses are required to be reported to the county agricultural commissioner (CAC), who, in turn, reports the data to DPR. DPR also collects reports from structural pest control businesses for pesticide use in schools. Full use reports include the amount and name of the pesticide applied, date and location (section, township, range) of the application, and, if the application was agricultural, the crop. The primary exceptions to the use reporting requirements are home and garden use, and most industrial and institutional use. The pesticide use reports are compiled by DPR and made available on disc and on DPR's Web site. DPR also provides support to the CACs on their administration of the computer systems and applications for the Restricted Material Permit Program, which is used to manage, track, and collect data for permits, operator identifications, and pesticide use reports.

#### **Performance Goal 1: Administer the statewide permitting and pesticide use reporting programs.**

1. In November 2007, publish the 2006 Annual Pesticide Use Report, including major categories.
2. Support the ongoing collection, validation, and editing of pesticide use data for the pesticide use reporting program.
3. Support changes to pesticide use report process as required by the new regulations designed to reduce emissions from volatile organic compounds.

**Monitoring/Surveillance (Continuous Evaluation)**

Monitoring/surveillance is an ongoing process to determine the fate of pesticides, protecting the public and the environment from pesticide contamination through analyzing hazards, and developing pollution prevention strategies. Monitoring/surveillance program activities include ground water monitoring, surface water monitoring, air quality monitoring, pesticide illness surveillance, produce surveillance, and special monitoring programs such as pest management and eradication, environmental fate, and human exposure monitoring projects. The monitoring of pesticide residues in food is also a major component of the monitoring/surveillance activities.

**Performance Goal 1: Monitor pesticide residues in food.**

1. State residue monitoring: Collect over 3,000 samples.
2. Pesticide Data Program: Collect over 2500 samples.
3. Microbiological Data Program: Collect 850 samples.
4. Compile 2008 Annual Residue Summary: Post to Web site by June 2009.

**Performance Goal 2: Evaluate pesticides in air.**

1. Evaluate techniques for determining Volatile Organic Compound (VOC) emissions from pesticides.
2. Evaluate pesticides in Environmental Justice communities.
3. Pursuant to the Toxic Air Contaminant Act, evaluate chloropicrin as a potential environmental contaminant.

**Performance Goal 3: Evaluate pesticides in ground water.**

1. Reduce the potential for pesticides to migrate to California's ground water by improving our ability to predict the behavior of pesticides in the environment.
2. Improve ground water monitoring and pesticide data resources to facilitate modeling and mitigation efforts.

**Performance Goal 4: Evaluate pesticides in surface water.**

1. Evaluate 64 pesticides as potential environmental contaminants. Pesticides include organophosphates, carbamates, triazines, dinitroanilines, thiram, pyrethroids, and other herbicides.
2. Produce annual update of the surface water database.

**Performance Goal 5: Evaluate Human Exposures to Pesticides.**

1. Occupational Exposures:
  - a. Initiate two new worker exposure monitoring studies.
  - b. Develop a draft report of the dermal exposure monitoring of 30 cotton and tomato irrigators to oxamyl residues.
  - c. Expand mixer/loader/applicator exposure monitoring study to sulfur dust.
  - d. Complete the report for the observation study of applicator exposure to dust formulations.
2. Pesticide Illness Surveillance Program (PISP):
  - a. Complete 1,150 pesticide episode case reviews and evaluations, and prepare the 2007 annual report of pesticide-related illnesses and injuries.
  - b. Respond to 100 query requests of the PISP database.
  - c. Continue work with the U.S. EPA Border 2012 Project, assist Mexico's health department to set up a pesticide illness surveillance program.
  - d. Make PISP data available online.
  - e. Review priority episodes from 2001-06 and identify recurrent contributing factors. Draft a report that future projects will be based on.
  - f. Develop and administer an illness reporting tracking system for eradication projects.

**Mitigation of Human Health Risks**

Mitigation of human health risks involve developing mitigation strategies and proposals based on scientific data for pesticides that have unacceptable risks to humans associated with exposure. These may include unacceptable pesticide exposure in air, the workplace, and in food and water. Mitigation measures may include developing proposed label changes, regulations (includes rulemaking process), and placing conditions on registration. As part of the mitigation development process, efforts are placed on obtaining and providing input on mitigation proposals from both internal and external stakeholders, responding to their comments, conducting a peer review of mitigation documents, and finalizing documents for release to the public.

**Performance Goal 1: Implement Mitigation Measures for Specific Pesticides.**

1. Complete the mitigation process for two pesticides; continue development of mitigation strategies for four pesticides; and initiate the development of mitigation strategies for two pesticides.

**Performance Goal 2: Worker Risk.**

1. Continue the development of two rulemaking actions (hand and eye protection and phosphine restricted materials).

2. Focus training and outreach efforts.
  - a. Participate in 15 outreach sessions with health professionals, worker advocates, commodity groups and government agencies to address worker protection and public health issues.
  - b. Provide 10 training sessions on personal protective equipment, including the revised respiratory protection regulations, and industrial hygiene.
  - c. Provide two training sessions to emergency responders on handling pesticide-related incidents.
  - d. Complete a draft PSIS leaflet for use as training material that focuses on hazards, routes, symptoms and sources of pesticide exposure. Complete an evaluation of agricultural fieldworker training requirements, outreach materials, assessments of fieldworker training needs and other sources of information prior to the development of the PSIS leaflet.
  - e. Work with the community clinics in San Diego and Sonoma Regions and explore contacts with Yuba, Butte, Sutter, Glenn and Imperial Counties to provide outreach on pesticide safety, discuss physician-reporting requirements, and distribute copies of Recognition and Management of Pesticide Poisonings. Coordinate with MiVia to conduct physician training at clinics. Coordinate these outreach efforts with OEHHA and other agencies.
3. In coordination with the California Agricultural Commissioners and Sealers Association and the Department of Industrial Relations, negotiate changes to the existing memorandum of understanding.
4. Continue working with OEHHA and pilot counties (Fresno, Monterey, San Diego) in developing a web-based physician reporting system.
5. Provide Spanish translation of outreach documents and worker safety presentations for approximately 10 documents related to environmental justice projects, community right to know issues, training, and health and safety.
6. Prepare and implement a work plan to address the recommendations developed during the review of illnesses following structural applications (HS-1854).
7. Review and process 10 exposure study protocols involving human participants.
8. Provide training to Enforcement/CAC staff and affected stakeholders on new notification/hazard communication regulations.

**Performance Goal 3: Mitigating Community Risk.**

1. Air Initiative – Revise and implement VOC emission reduction regulations for fumigants (metam-sodium/MITC-generating pesticides, methyl bromide, 1,3-dichloropropene, chloropicrin and sodium tetrathiocarbonate).
2. Air Initiative – Revise and update, in cooperation with the Air Resources Board, the State Implementation Plan under the Clean Air Act, a commitment to reduce agricultural and commercial structure pesticide VOC emissions.

### **Mitigation of Environmental Hazards**

Mitigation of environmental hazards is the process of developing strategies and proposals based on scientific data to reduce and lower the risks for pesticides that have unacceptable risks to the environment (including endangered species and phytotoxic residues) from contaminants in ground water, surface water, and air. As part of the mitigation development process, efforts are placed on obtaining and providing input on mitigation proposals from both internal and external stakeholders, responding to their comments, conducting a peer review of mitigation documents, and finalizing documents for release to the public.

#### **Performance Goal 1: Mitigation pesticides impacts on ground water.**

1. Develop and implement regulations, policies, and guidance to improve ground water protection from pesticide contamination.
2. Develop and implement mitigation measures to reduce the adverse impacts of agricultural use practices on ground water.
3. Improve coordination and information sharing between the Department of Pesticide Regulation and California Environmental Protection Agency Boards, Departments, and Offices, as well as, various public agencies and research institutions.
4. Assure that ground water protection regulations are implemented effectively by the County Agricultural Commissioners and the regulated community.

#### **Performance Goal 2: Mitigate pesticides impacts on surface water.**

1. Identify and evaluate mitigation options for pesticides adversely affecting the environment (diazinon, chlorpyrifos, antifouling paints and pyrethroids) in cooperation with the State Water Quality Control Board, the regional water quality control boards, and other stakeholders.
2. Produce geographic information system and mathematical models to predict pesticide runoff, toxic effects and assess mitigation measures.
3. Publish educational materials to protect surface water quality.
4. Promulgate regulations to protect surface water from pesticide contamination and toxic effects.

#### **Performance Goal 3: Nontarget and endangered species protection.**

1. Endangered species:
  - a. Support statewide permitting, use reporting, and geographic information systems by maintaining the Pesticide Regulations Endangered Species Custom Real-time Internet Bulletin Engine (PRESCRIBE) online database application, updates to the Endangered Species Program Web site, and ongoing support for PRESCRIBE custom bulletins.

- b. Disseminate information pertinent to court-ordered pesticide use buffers for the protection of Salmonids in California.
  - c. Disseminate information pertinent to the stipulated injunction for the protection of California Red-legged Frog.
  - d. Develop new or revised outreach material for 3 to 6 endangered species. In the next six months, we expect to develop artwork and information for 16 endangered plant species.
  - e. Translate existing applicator training materials for endangered species identification to Spanish. Translation of materials is ongoing. Over the past six months, we have translated materials for 16 species. In the next six months, we expect to translate materials for 16 species. 20,000 sets of endangered species cards in Spanish will be printed for distribution to counties, applicators, and industry groups.
2. Consult with the U.S. Fish and Wildlife Service on protection measures for California Red-Legged Frog.
  3. Consult with California Department of Fish and Game on security needs in PRESCRIBE to protect endangered species.

#### **Pest Management Programs**

Pest management programs include school Integrated Pest Management (IPM), agricultural and urban pest management projects on high priority pesticides, IPM innovator awards, technical/scientific resource services, and outreach to stakeholders.

#### **Performance Goal 1: School IPM: Prevent children's exposure to pesticides by facilitating adoption of IPM in schools.**

1. Conduct four planned school IPM workshops to instruct school district staff on techniques to control pests while reducing risks by June 2008.
2. Conduct outreach and education:
  - a. Maintain Web site information on an ongoing basis.
  - b. Publish a poster to be released in Spring of 2008 and a seasonal calendar of IPM activities and a poster to be released Spring 2009.
3. Respond to approximately 250 inquiries from schools and the public on an ongoing basis.
4. Prepare and give 8-10 seminars on school IPM.
5. Develop and distribute 2-3 technical outreach documents on school IPM.
6. Conduct and analyze the 2007 School IPM Survey statewide.
7. Receive Green California Leadership Award.
8. Participate in the National IPM Working Group, the Western School IPM Implementation and Assessment Working Group, and development of the national Pest Management Strategic Plan.
9. Establish membership with the Collaborative for High Performance Schools (CHPS) to participate on the (CHPS) Technical Committee for Existing Schools.



**Performance Goal 2: School and Child Day Care IPM: Implement the Child Day Care IPM provisions as mandated by Assembly Bill 2865 (Chapter 865, Statutes of 2006).**

1. Hired and trained new staff.
2. Met with stakeholders and prepared communications.
3. Prepared IPM train-the-trainer program for child day care facilities.
4. Gave five IPM presentations to child care stakeholders.
5. Developed an IPM survey for child care providers.
6. Prepared the first in a series of articles for "Health Connections" a newsletter for child care providers.
7. Answered inquiries from the public on an ongoing basis.

**Performance Goal 3: Promote pollution prevention.**

1. Protect water quality by
  - a. Continuing the Food Quality Protection Act grant to demonstrate organophosphate alternatives in stone fruit production.
  - b. Monitoring pyrethroid transport in the San Joaquin River watershed (SWRCB) by March 2009.
  - c. Assessing economic and environmental measures associated with pheromone use on codling moths in walnuts by March 2008.
2. Recommended 8 IPM Innovator Award recipients in July 2007, and conducted award ceremony in January 2008.
3. Environmental Justice Pilot Project in Parlier - Analyzed pest management trends and practices that reduce pesticide risk. Staff completed a final report October 2007.
4. Air Quality Initiative - Identify and promote innovative technologies that reduce pesticide use and risk.
5. Urban Pest Management Working Group - Meet with various public agencies, UC, CSU, and private industry on a monthly basis to make recommendations to PMAC on urban IPM priorities in February 2008.
6. Support IPM in retail stores - Finalized a settlement with Walgreens that directs them to work with the Our Water, Our World (OWOW) program to carry pest control products that support IPM and best management practices. Continue to work with OWOW to inform Walgreens.
7. Support the Natural Resource Conservation Service in promoting the use of Farm Bill money for IPM.
8. Developed US EPA grant application to reduced VOC emissions from pesticides and prevent surface water contamination.
9. Lead coordination on priorities and leverage resources with UC, CSU, Western Regional IPM Center, CDFA, etc. Identified scientific staff role to convene these sessions using a cross-media approach.

**Performance Goal 4: Implement the Alliance Grant Program.**

1. Post the grant solicitation package to DPR's Web site July 2007.
2. Hire and train new staff.
3. Award three to four grants in the 2007/08 fiscal year.
4. Second grant solicitation package posted January 2008, three new grants awarded.
5. Plan for the next grant cycle in 2008/09.

**Enforcement**

Enforcement activities include establishing statewide enforcement priorities, overseeing CAC's pesticide use enforcement activities, conducting investigations, and taking enforcement action. Statewide enforcement guidance includes identifying priorities and developing a prioritization plan of performance objectives and strategies; negotiating enforcement work plans with each CAC; preparing an evaluation on the effectiveness of the county program; and consulting with CACs on the pesticide enforcement program, including investigations, researching and analyzing various compliance trends, and advising CACs of DPR policies, procedures, and developing issues. Enforcement activities include determining if an administrative civil penalty is required and sending a Notice of Proposed Action to a respondent; upon request, conducting a hearing with the respondent; preparing findings of fact, Notice of Final Decisions, and Director's Order; signing Notice of Final Decision and Order; providing appeal procedures to the respondent; and levying a civil penalty if respondent's appeal does not lead to a reversal of the decision.

**Performance Goal 1: Oversee the county pesticide regulatory program.**

1. Provide oversight and technical, scientific assistance to county regulatory programs:
  - a. Coordinate and provide guidance to CACs in developing their work plans.
  - b. Conduct CAC performance evaluations.
  - c. Post the county work plans on DPR's Web site.
  - d. Post the county performance evaluations on DPR's Web site.
2. Conduct the county oversight inspection program:
  - a. Conduct 100 county oversight inspections, both risk-based and neutral scheme.
    - i. Target oversight inspections by focusing on specific industry (growers, packing houses, commodity groups), chemical groups (fumigants), work activities, equipment uses (sprinkler applications), and/or repeat violators.
    - ii. Conduct repeat-violator inspections based on Enforcement Action Database.
    - iii. Analyze and provide technical guidance to CAC inspection programs using information from oversight inspections of the counties and from the inspection tracking database to identify and focus on common violation trends to use in field monitoring.

- b. Analyze DPR's oversight and follow-up inspections to identify inspection efficiencies and measure program progress.
- c. Administer the Pesticide Regulatory Activities Monthly Report, including data input, quarterly reports, and final report.
- d. Work with CACs to identify technical and scientific data needed to support the program and reduce exposures to humans and the environment.
- e. Coordinate with the CAC subcommittee to analyze the Pesticide Regulatory Activities Monthly Report and use an activities-reporting form to measure performance.

**Performance Goal 2: Conduct compliance monitoring.**

- 1. Conduct inspections in conjunction with the U.S.EPA Cooperative Agreement.
  - a. Conduct Pesticide Producing Establishment Inspections (60)
  - b. Conduct County Oversight Inspections.
    - i. Certified Applicators/Pesticide Dealers (10).
    - ii. Agricultural Use and Follow-up Inspections (150).
    - iii. Nonagricultural Use and Follow-up Inspections (30).
    - iv. Worker Protection Standard Tier 1 Inspections (30).
    - v. Miscellaneous Inspections (10).
  - c. Collect and analyze pesticide product samples in conjunction with the U.S.EPA Cooperative Agreement (40).
- 2. Conduct 400 Product Compliance Inspections (130 federal and 270 state).
- 3. Conduct and oversee Pesticide Episode Investigations including human illness and environmental impacts with special emphasis on Priority Investigations to address the use/misuse of pesticides in a priority episode.

**Performance Goal 3: Ensure consistent and appropriate enforcement response.**

- 1. Evaluate data to identify persons with repeat violations for possible state actions.
- 2. Administrative Hearings Program – Complete outreach materials revisions (regulatory toolbox and Administrative Hearing Guides) for CAC staff and management acting as county advocates or hearing officers.
- 3. Review Enforcement Response regulations to determine if amendments are needed.

**Performance Goal 4: Develop and conduct State and County regulator training.**

- 1. Develop instructional materials and conduct training sessions for over 400 CAC staff statewide on numerous topics, including the following:
  - a. Structural pest control and fumigations.
  - b. Investigative training on human and environmental exposure incidents.
  - c. Hearings and advocacy training for CAC staff to ensure enforcement response.
  - d. Restricted materials permit conditions and requirements.
- 2. Continue the Enforcement Branch educational Liaison Internal Forum sessions.

**Performance Goal 5: Collect, review and disseminate statewide data.**

1. Collect data for the Pesticide Regulatory Activities Monthly Report, Inspection Tracking Data Base and Enforcement Tracking Data Base.
2. Analyze and disseminate the data through various reports including annual USEPA and CalEPA reports and county statistical profiles.

**Performance Goal 6: Meet emerging issues.**

1. Continue development of the Pesticide Use Enforcement Program Standards Compendium for use by CAC and DPR staff.
  - a. Volume 1 – DPR, enforcement, and related programs: In development.
  - b. Volume 2 – Laws and Regulations: Completed; annual revisions as necessary.
  - c. Volume 3 – Restricted Materials and Permit Management: Completed.
  - d. Volume 4 – Inspection Procedures: Completed
  - e. Volume 5 – Investigation Procedures: Completed.
  - f. Volume 6 – Enforcement Guidelines: In development.
  - g. Volume 7 – Hearings Sourcebook: In development.
  - h. Volume 8 - Interpreting pesticide laws and regulations. – In development
2. Coordinate with Information Technology Branch to incorporate new regulatory requirements for conducting inspections, including issuing enforcement violation actions, into the Enforcement databases.
3. Analyze residue data from product to identify trends and enforcement focus.
4. Coordinate Border activities with Mexico by communicating with border region agricultural officials and providing training to growers and fieldworkers.
5. Explore development of a pesticide incident response team.